Patent Claims

1. A process for treating one side of silicon wafers in a liquid bath, characterized in that the underside of the silicon wafers is treated in the liquid bath without the top side previously having been protected or masked.

2. The process as claimed in claim 1, characterized in that the silicon wafers are processed continuously in a once-through process.

3. The process as claimed in claim 2, characterized in that the undersides of the silicon wafers are lowered into the liquid bath.

4. The process as claimed in claim 1, characterized in that as part of a production line the silicon wafers are conveyed horizontally through the treatment liquid located in the liquid bath.

5. The process as claimed in claim 4, characterized in that the liquid bath used is a tank whose peripheral edge is lower than the level of the treatment liquid.

6. The process as claimed in one of claims 1 to 5, characterized in that the edges of the silicon wafers are also treated.

7. The process as claimed in one of claims 1 to 6, characterized in that the treatment is an etching step and is carried out in a liquid composition which contains NaOH, KOH, HF, HNO_3, HF with O_3, and/or HF with oxidizing agent, such as for example oxidizing acid.

8. The process as claimed in claim 7, characterized in that the oxidizing agent is an oxidizing acid.

9. The process as claimed in claim 7 or 8, characterized in that the liquid composition contains at least one additive for binding the gases formed during the etching.

10. A process for treating one side of silicon wafers, characterized in that as part of a production line the wafers are conveyed horizontally through a treatment liquid located in a liquid bath, with the underside of the wafers being treated without the top side having previously been protected or masked.

11. The process as claimed in claim 10, characterized in that the undersides of the silicon wafers are lowered into the liquid bath over the production line.

12. The process as claimed in claim 10, characterized in that the silicon wafers are conveyed horizontally through the treatment liquid located in the liquid bath over the production line.

13. The process as claimed in claim 12, characterized in that the liquid bath used is a tank whose peripheral edge is lower than the level of the treatment liquid.

14. The process as claimed in claim 10, characterized in that the production line comprises a multiplicity of conveyor rolls.

15. The process as claimed in claim 14, characterized in that the conveyor rolls are in each case arranged on axle elements.

16. The process as claimed in claim 15, characterized in that each axle element is encapsulated in a fluid-tight manner with respect to the treatment liquid.

17. The process as claimed in one of claims 10 to 16, characterized in that the edges of the silicon wafers are also treated.